

REMARKS

The Official Action mailed March 15, 2005, has been received and its contents carefully noted. Filed concurrently herewith is a *Request for One Month Extension of Time*, which extends the shortened statutory period for response to July 15, 2005. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on September 22, 2003, and January 4, 2005. However, the Applicants have not received a response to the *Request for Corrected PTO 1449 Form* filed on February 24, 2005. The *Request* noted that "the Information Disclosure Statement filed January 4, 2005 contains errors" and requested that the Examiner strike through the citation of U.S. Patent Nos. 6,051,453, 6,576,534, 6,599,790, 6,602,765, and 6,632,749, and the Official Action cited in the "Other Prior Art – Non Patent Literature Documents" section of the 1449. (Although the *Request* cited "5,576,534," "6,576,534" was intended.) These references should not appear in the record and should not appear on the face of any patent issuing from the present application. Attached is a copy of the "List of References cited by applicant and considered by examiner" (Form PTO-1449) attached to the Official Action. In order to facilitate matters, the Applicants have crossed through the references discussed in the *Request*. The Applicants respectfully request that the Examiner provide an initialed copy of the attached Form PTO-1449 evidencing removal of the erroneous citations from the record.

Claims 1-22 were pending in the present application prior to the above amendment. Claim 15 has been canceled without prejudice or disclaimer, and dependent claims 17-22 have been amended to depend solely from independent claim 16. Accordingly, claims 1-14 and 16-22 are now pending in the present application, of which claims 1-8 and 16 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Official Action rejects claims 1, 3 and 5-7 as anticipated by U.S. Patent No. 6,632,749 to Miyasaka et al. The Applicants respectfully traverse the rejection because the Official Action has not established an anticipation rejection.

As stated in MPEP § 2131, to establish an anticipation rejection, each and every element as set forth in the claim must be described either expressly or inherently in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The Applicants respectfully submit that an anticipation rejection cannot be maintained against the independent claims of the present application. Independent claims 1-4 recite an island-like light absorbing layer over a semiconductor layer with an insulating layer interposed therebetween, independent claims 5, 7 and 8 recite a light absorbing layer that overlaps with a whole surface of a semiconductor layer through an insulating layer, and independent claim 6 recites a second insulating layer between an island-like semiconductor layer and a light absorbing layer. Figures 5(a)-(d) and the disclosure at column 14, lines 27+ of Miyasaka appear to teach glass substrate 501, underlayer protecting (first silicon oxide) film 502 over the substrate, semiconductor island 503 over the film and second silicon oxide film 504 over the island. However, Miyasaki does not teach an island-like light absorbing layer over a semiconductor layer with an insulating layer interposed therebetween; a light absorbing layer that overlaps with a whole surface of a semiconductor layer through an insulating layer; or a second insulating layer between an island-like semiconductor layer and a light absorbing layer, either explicitly or inherently.

Since Miyasaka does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102 are in order and respectfully requested.

The Official Action rejects claims 2, 4, 8, 11, 12, 15, 16, 19 and 20 as obvious based on Miyasaka and claims 9, 10, 13, 14, 17, 18, 21 and 22 as obvious based on the

combination of Miyasaka, and JP 2001-102585 to Yamamoto et al. The Applicants respectfully traverse the rejection because the Official Action has not made a *prima facie* case of obviousness.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Regarding independent claims 1-8, please incorporate the arguments above with respect to the deficiencies in Miyasaka. Yamamoto does not cure the deficiencies in Miyasaka. The Official Action relies on Yamamoto to allegedly teach a light-absorbing layer formed from a metal nitride (page 6, Paper No. 20040924). However, Miyasaka and Yamamoto, either alone or in combination, do not teach or suggest an island-like light absorbing layer over a semiconductor layer with an insulating layer interposed therebetween; a light absorbing layer that overlaps with a whole surface of a semiconductor layer through an insulating layer; or a second insulating layer between an island-like semiconductor layer and a light absorbing layer.

Independent claim 16 recites a light-absorbing layer whose transmission factor of pulsed light is 70 percent or less and a glass substrate whose transmission factor of pulsed light that is emitted from a pulsed light source is 70 percent or more. The Official Action concedes that Miyasaka fails to disclose that “a transmission factor of a pulsed light by the island-like light-absorbing layer is [70] percent or less and a transmission factor of the pulsed light by the glass substrate is 70 percent or more” (page 4, Paper No. 20040924). The Official Action does not provide any teaching from the prior art to teach or suggest a light-absorbing layer whose transmission factor of pulsed light is 70 percent or less and a glass substrate whose transmission factor of pulsed light that is emitted from a pulsed light source is 70 percent or more. Rather, the Official Action asserts that “[it] would have been obvious to one having ordinary skill in the art at the time the invention was made that the selection of such parameters such as energy, concentration, temperature, time, moral fraction, depth, thickness, etc., would have been obvious and involve routine optimization which has been held to be within the level of ordinary skill in the art” (pages 4-5, *Id.*). The Applicants respectfully disagree and traverse the above-referenced assertions in the Official Action.

As set forth in MPEP § 2144.05, “[a] particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation.” *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). In the present case, the Applicants respectfully submit that the Official Action has failed to sufficiently show that one of skill in the art at the time of the present invention would have recognized that a transmission factor of a light-absorbing layer and a glass substrate is a result-effective variable in the context of the present invention.

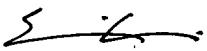
Furthermore, the Federal Circuit reversed a rejection based on inherency, which was based on what would result due to optimization of conditions, not what was necessarily present in the prior art. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d

1955, 1957 (Fed. Cir. 1993). Therefore, the Applicants respectfully submit that Miyasaka and Yamamoto, either alone or in combination, do not teach or suggest a light-absorbing layer whose transmission factor of pulsed light is 70 percent or less and a glass substrate whose transmission factor of pulsed light that is emitted from a pulsed light source is 70 percent or more.

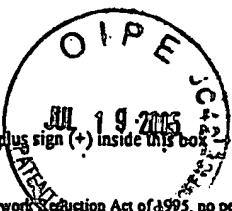
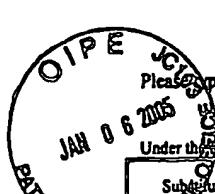
Since Miyasaka and Yamamoto do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,


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| | | Based On | 10/664,866 |
| | | Filing Date | September 22, 2003 |
| | | First Named Inventor | Toru TAKAYAMA et al. |
| | | Group Art Unit | 2818 |
| | | Examiner Name | T. Le |
| Sheet | 1 | of | 2 |
| | | Attorney Docket Number | 0756-7201 |

U.S. PATENT DOCUMENTS

| Examiner Initials ¹ | Cite No. ¹ | U.S. Patent Document | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|--------------------------------|-----------------------|----------------------|--------------------------------------|---|---|---|
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| TL | | Official Action dated October 4, 2004 for U.S. Serial No. 10/664,866. | |

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|--------------------|---------------|-----------------|--------|
| Examiner Signature | <i>Thaler</i> | Date Considered | 3/3/05 |
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